

Sub a1
CLAIMS

- 5 1/ An intersomatic implant designed to be inserted in the disk space defined between two adjacent vertebrae, namely an overlying vertebra and an underlying vertebra, for the purpose of reestablishing the anatomic space between the vertebrae, the implant being in the form of a cage (1) that is generally in the shape of a rectangular block having at least two sagittal walls (2, 3) substantially parallel to a sagittal plane (S) and interconnected at least by an anterior transverse wall (4) and by a posterior transverse wall (5) extending substantially parallel to a frontal plane (F), the walls (2 to 5) defining between them an open volume (7) for bone filler and presenting rims (10, 10') extending on one surface to define a first transverse face (8) and on the opposite surface to define a second transverse face (9),
- 10 the implant being characterized in that:
- the first transverse face (8) presents in the sagittal plane a convex profile (C₈) congruent with the sagittal anatomic profile of an overlying vertebra;
 - 15 · the second transverse face presents in the frontal plane a convex profile (C₉) congruent with the frontal anatomic profile of an overlying vertebra; and
 - the profile (C₈, C₉) of each transverse face (8, 9) is defined by protuberances (11) formed on the rims (10, 10') of the sagittal and frontal walls.
- 20 2/ An implant according to claim 1, characterized in that the rims (10, 10') of the sagittal and frontal walls carry protuberances (11) forming ridges extending parallel to one another and to the frontal plane (F).
- 25 3/ An implant according to claim 1 or claim 2, characterized in that it has at least one radio-opaque marker (13) extending over at least a portion of the height of a wall,
- 30 4/ An implant according to any one of claims 1 to 3, characterized in that it has two housings (20) for receiving the jaws (17) of a manipulation forceps, the housings extending substantially facing each other in a frontal direction perpendicular to the sagittal plane (S) of the cage.
- 5/ An implant according to claim 4, characterized in that each housing (20) opens out at least to the external face of one of the sagittal walls (2, 3).
- 35 6/ An implant according to claim 4 or claim 5, characterized in that the walls are arranged to include antirotation means (23) for co-operating with complementary means (24) arranged on the jaws (17) of the manipulation forceps so that, when the

cage is engaged by the forceps, the cage is prevented from moving relative to the forceps.

5 7/ An implant according to claim 6, characterized in that each housing (20) opens to the sagittal walls (2, 3) in a respective groove (23) extending to the external face of the anterior wall so as to constitute the antirotation means and so as to enable the jaws of a manipulation forceps to be inserted.

10 8/ Manipulation forceps for an implant according to any one of claims 1 to 7, the implant being in the form of a cage (1) that is generally in the shape of a rectangular block comprising at least two sagittal walls (2, 3) substantially parallel to a sagittal plane (S) and interconnected at least by an anterior transverse wall (4) and by a posterior transverse wall (5) substantially parallel to a frontal plane (S), the cage being provided with two housings (20) extending substantially facing each other in a frontal direction (F) substantially perpendicularly to the sagittal plane of the cage, the forceps having two branches (16) movable relative to each other and each provided with an insert-engaging jaw,

15 the forceps being characterized in that each jaw (17) is provided with a radial stud (21) extending in line with the other radial stud and suitable for being moved towards the other stud so as to be engaged in a respective housing (20) formed in the implant.

20 9/ Manipulation forceps according to claim 8, characterized in that the jaws (17) are arranged to present antirotation means (24) complementary to means (23) provided on the cage so as to enable the cage to be prevented from moving relative to the forceps.

25 10/ Manipulation forceps according to claim 9, characterized in that each jaw (17) includes, as its complementary antirotation means (24), an arm which is provided at its end with a radial stud (21) and which is designed to be engaged, at least in part, in a groove (23) formed in a sagittal wall and extending from the housing (20) to the external face of the anterior wall (4).

30 11/ Manipulation forceps according to any one of claims 8 to 10, characterized in that each jaw (17) is provided with a stop abutment (27) for coming into contact against the external face of the anterior transverse wall (4) of the cage when the studs (21) are engaged in the housings (20) so as to transmit forces exerted on the forceps.

12/ Manipulation forceps according to claim 11, characterized in that each stop abutment (27) is arranged on a jaw (17) so as to come into contact with the external face of the anterior transverse wall (4) of the cage substantially in line with the sagittal walls (2, 3).

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13/ Manipulation forceps according to claim 8, characterized in that the jaws (17) are urged towards each other by the branches (16).